Interior Columbia TRT Meeting
May 17-19, 2004
NMFS Office, Portland, OR

Members: Cooney, Spruell, McClure, Howell, Petrosky, Schaller, Carmichael, Utter (5/17-5/18), McCullough, Hassemer
Non-Members: Morita, Andonaegui, Seminet, Baldwin (5/17-5/18), Hatcher (5/18-5/19), Martin (5/18-5/19), Holzer

I. TRT Roles Memo
- A. Arose from interface with subbasin plans
- B. Comments/Concerns
  1. Future TRT comments are to be submitted to coordinators for oversight to insure comments remain technical in nature
     - a. Might this give the appearance of comments being put past policy review?
       - i. Rather than passing tech comments through a review, suggest that final copy of comments be distributed early to policymakers to be aware of any implications of technical comment release.
  2. All-H analysis
     - a. ESU roll up affecting the population scale plan (chicken-egg problem)
  3. Subbasin plans vs. Population-level plans
     - a. What are the distinctions and how do they play into one another
  4. Guideline for TRT members on making comments outside of their capacity as a TRT member
     - a. Personal comments should be clearly labeled as such, to avoid confusion between TRT/NOAA and member opinion.

II. RSRP Meeting
- A. Panel members recently replaced with new members (all but 1)
- B. Meeting May 19-21
  1. Concerning issues important to the TRT; (reintroductions…)
  2. Utter is communicating with the panel
  3. Main topic this meeting – population identification, general overview of recovery planning

III. Hatchery policy update
- A. Update on NMFS current policy regarding hatchery fish in endangered populations.
  1. released with status review by May 28th
     - a. after public comment, final draft out within a year
  2. Should not affect TRT work in short-term

IV. Presentation (Morita): ecoregion analysis
- A. Correlation between Ecoregions and environmental variables important to salmon
  1. intersect ecoregion and env. Variables with random 200m segments in GR/Imn and SF basins
     - a. ANOVA sig. (<0.05) on variables & ecoregions done so far
- B. Assuming (A), can diversity scores derived from ecoregions predict actual variation?

1. Variance in run timing against 3 diversity indices
2. Future analyses
    a. Genetic diversity (heterozygosity?)
    b. Cluster analysis

C. Comments
1. PCA in addition to cluster analysis –drivers can be identified by eigenvalues
2. Compare steelhead and chinook diversity
    a. At same sample sites (not-population-wide)
    b. Test whether the surrogate of env diversity applies – look for positive correlation
3. Which variables to keep studying?
    a. Elev, temp, gradient, precip
    b. Vegetation, geology?
        i. Veg. Depends on other variables? Redundant?
        ii. Messy calculations
    c. Stream size (diversity in a range of sizes)
4. Similarity of ecoregions
    a. Are clustered ecoregions similar? (i.e. should some ecoregions be lumped?)
5. Species richness (non-salmonids)
    a. Does it indicate salmon diversity
6. Are particular ecoregions more conducive to diversity?
7. Can points be assigned to variables based on ecoregion in a diagnostic manner

V. PopID

A. Oregon Coast draft just released
1. different concept, consistent with VSP
2. 3 types of pops they define – functionally independent, potentially, and dependent

VI. Hatchery Spawners

A. McClure Handout
1. Petrosky will help fill out the table, index areas
2. Work on distinguishing which hatchery samples (i.e. which years) are distinct from individual (annual) samples
3. Add column – dominant source hatchery

VII. Biological Delisting Criteria Summary

A. Send comments to Cooney, inc. citations to add, editing, etc

B. Intro
1. Discussion of the new version
2. Intended audience – all planners
3. How much of a technical document this will function as
4. Emphasize level of certainty

C. ESU Description
1. Parameters/viability assessment
2. Qualify the 5% extinction risk threshold
    a. Previous policy, other TRTs (could change)
3. To add – age structure

VIII. Spatial Structure and diversity

A. The two are interrelated
B. Differences in how described in VSP
1. SS was a means to an end, while Div is things to preserve
C. Decision – the two factors will be combined (like A&P are)

IX. Outline of process for spatial structure and diversity

A) Brief Introduction

1) Why both important for population viability.

a) Diversity VSP

i. Allows use of wide array of environments

ii. Protects spp against short-term temporal and spatial changes.

iii. Genetic diversity - ability to survive long-term changes.

b) Spatia Structure VSP

i. Hedge against time lag in P/A

ii. Population structure- evolutionary processes

c) Additional TRT

i. Catastrophic loss

ii. Natural patterns of gene flow

2) VSP Guidelines

a) Spatial stucture

b) Diversity

3) Why We combined 2 VSP parameters

B) Our Guidance

C) Table Describing Goals

1) Maintain natural variation in traits

a) Natural proceses

b) Gene flow

c) Phenotypic expression

2) Avoid catastrophic risk

a) Distribution of patches

b) Maintain Sources

D) Major Grouping criteria

E) ESU level criteria

F) Summary / Conclusions

X. Table creation: Spatial Structure and Diversity

A. Themes, Mechanisms, Hi-Med-Lo risk
1. (Spruell has electronic copy)

XI. Comments on outline/table

1. next step - Develop these ideas so subbasin planners can use it for assessment…
2. or start working on establishing metrics to quantify risk categories?

3. Clarify “low risk” in text (lowest risk, not just historical)
4. Unnatural straying
    a. Caused by high temp due to hydro system
    b. Patterns of straying not historically present
    c. Rename as some “change” in stray rate
5. Straying into populations
    a. Change in proportion of strays in an area
        i. Stray rate not necessarily the important number
6. Maintaining source populations
    a.

XII. Patches

A. 500/250 number for patch
    1. arbitrary number
B. Describe in text what a “Patch” is
    1. It can support large proportion of a sustainable population
    2. Working on other ways of expressing the #

XIII. ESU Level

A. Plan -- May 21
    1. McClure, Spruell, Hassemer to work on SS-D section
B. Circulate final draft as soon after May 28th as possible for domain team
C. To serve as a “status update”
    1. informally distributed, not submitted for formal comments
D. Intrinsic potential
    1. look at rearing capacity
    2. spatially explicit data about spawning
    3. upper reach bank width – what is correct?